

## ABSTRACT OF THE DISCLOSURE

Disclosed is a method and apparatus for multipath mitigation using an antenna array. An antenna array made up of a plurality of antennas is used to receive satellite  
5 signals from satellites. Various configurations of antenna arrays is disclosed, including a linear vertical antenna array and a horizontal antenna array in which the antenna elements are located in a horizontal plane. A switch sequentially connects each of the antenna outputs to a single processing path to generate a common additive signal. The common additive signal is provided to satellite channel processors, each of which  
10 processes the signals from an associated satellite. A phase shift correction signal associated with each of the antennas is generated and synchronously applied to a carrier phase reference signal. A blocking signal may be applied to the satellite channel processors in order to block the processing of signals from an unwanted satellite.

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